



# UNITED STATES PATENT AND TRADEMARK OFFICE

*qu*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,155	09/25/2003	Siegfried Fleischer	42P8634C	7042

8791 7590 03/30/2004

BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
12400 WILSHIRE BOULEVARD, SEVENTH FLOOR  
LOS ANGELES, CA 90025

EXAMINER
----------

SOHN, SEUNG C

ART UNIT	PAPER NUMBER
----------	--------------

2878

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/671,155	FLEISCHER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Seung C. Sohn	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09252003</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because block diagrams (54, 62) need labeling. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Double Patenting*

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

3. **Claims 20-29** are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-8 and 10-11 of prior U.S. Patent No. 6,649,898. This is a double patenting rejection.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. ***Claims 8-9 and 11-13 are rejected under 35 U.S.C. 112, second paragraph,*** as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. On claim 8, "the power supply of the optic function subcircuit" lacks antecedent basis. On claim 9, "the clock input" lacks antecedent basis. On claim 11, "the photodetector" lacks antecedent basis. On claim 12, "the clock signal" lacks antecedent basis. Also, it is unclear how a gate is connected to the clock *signal*. Clarification is required. On claim 13, "the power supply" and "the amplifier" lack antecedent basis.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. ***Claims 1-5, 7-10 and 12-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Schneider (Patent No US 5,753,927).***

Regarding claim 1, Schneider shows in Fig. 1 the following elements of Applicant's claim:

- a) a light sensing device (12, i.e., optical voter) to produce a signal (16, i.e., voter output) in response to sensing light (Col. 3, lines 8-12);
  - b) an optic function subcircuit (28, i.e., intended load) integrated on the IC;
- and

c) a switch (20, i.e., power switching means) integrated on the IC and connected to the light sensing device (12) and to the optic function subcircuit (28) to activate the optic function subcircuit when light is sensed (Col. 3, lines 12-23).

**Regarding claim 2**, Schneider discloses that the light sensing device is a phototransistor (Col. 4, lines 27-28).

**Regarding claim 3**, Schneider discloses that the optic function subcircuit is an optical modulator.

**Regarding claim 4**, Schneider discloses that the optic function subcircuit is an optical receiver.

**Regarding claim 5**, Schneider shows in Fig. 1 that a light sensing circuit (36, i.e., operational amplifier circuit) between the light sensing device (12) and the switch (20) for amplifying and conditioning the light sensing signal (16) (Col. 3, lines 44-57).

**Regarding claim 7**, Schneider discloses that the switch (20) comprises a logic gate coupled to the light sensing device (12) and to an input to the optic function subcircuit (28) to alternately enable and disable the input to the optic function subcircuit (Col. 3, lines 14-23).

**Regarding claim 8**, Schneider discloses that the switch is connected to activate the power supply of the optic function subcircuit.

**Regarding claim 9**, Schneider discloses that the switch is connected to enable the clock input to the optic function subcircuit.

**Regarding claim 10**, Schneider shows in Fig. 1 the following elements of Applicant's claim:

- a) a circuit card (Fig. 2, 40, power voter assembly);
- b) an optical interface (Fig. 1, 18, i.e., optical input commands) on the circuit card; and
- c) a microprocessor (10, i.e., optical power switch) on the circuit card coupled to the optical interface, the microprocessor having a light sensing device (12) coupled to the optical interface to produce a signal (16) in response to sensing light through the optical interface, an optic function subcircuit (28), and a switch (20) connected to the light sensing device and to the optic function subcircuit to activate the optic function subcircuit when light is sensed (Col. 3, lines 6-30).

**Regarding claim 12,** Schneider discloses that the switch comprises a gate connected to the optic function subcircuit (28) and to the clock signal of the optic function subcircuit so that the clock signal is supplied to the optic function subcircuit when the photodetector is activated (Col. 3, lines 24-30).

**Regarding claim 13,** Schneider discloses that the switch comprises a transistor coupled across the power supply to the optic function subcircuit, the gate of which is connected to the amplifier so that the power supply is enabled when the photodetector is activated.

**Regarding claim 14,** Schneider discloses following steps of Applicant's claim:

- a) receiving light at a light sensing device of an integrated circuit (IC) (Col. 3, lines 8-10);

b) generating a light sensing signal in the IC in response to the received light (Col. 3, lines 10-12); and

c) activating a switch (20) integrated in the IC in response to the light sensing signal to activate an optic function subcircuit that is integrated in the IC (Col. 3, lines 12-23).

**Regarding claim 15**, Schneider discloses that receiving light comprises receiving light directed at an optical input/output port (Fig. 3, INPUTs 1-5).

**Regarding claim 16**, Schneider discloses that generating a light sensing signal (16) comprises amplifying and conditioning a photodetector output to remove short term transients (Col. 3, lines 43-57).

**Regarding claims 17-19**, Schneider discloses that activating a subcircuit comprises enabling a clock circuit, providing an enable signal to an enable port of the subcircuit and enabling a power supply to the subcircuit (Col. 3, lines 24-35).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**10. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider (Patent No US 5,753,927) in view of Embree et al. (Patent No US 5,903,190).**

Schneider shows the claimed invention as above, but is silent that the light sensing circuit comprises a current mirror in which one side of the mirror includes the photodetector and the other side of the mirror comprises a slow transistor, the gate of which is connected to the output of the photodetector. Embree et al. shows in Fig. 1 a current mirror (22) with a slow transistor (Q10). It would have been obvious to one of ordinary skill in the art to provide the current mirror and the slow transistor of Embree et al. in the device of Schneider for the purpose of compensating slower frequency response (Col. 2, line 65 – Col. 3, line 6).

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seung C. Sohn whose telephone number is (571) 272-2446. The examiner can normally be reached on Monday through Friday from 8:30 am to 5 pm.




If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SCS

SCS

  
THANH X. LUU  
PATENT EXAMINER